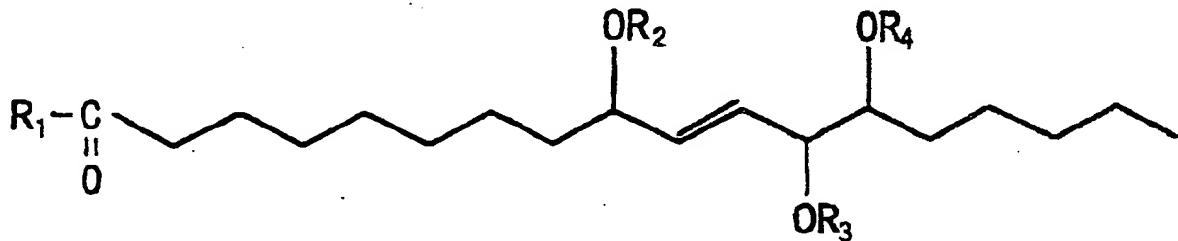


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (Currently Amended) A pharmaceutical composition comprising An adjuvant consisting essentially of a purified or synthesized hydroxy unsaturated fatty acid as an active ingredient and comprising a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety.
2. (Currently Amended) The pharmaceutical composition adjuvant of claim 1, wherein the unsaturated fatty acid with 18 carbon atoms has a trihydroxy-monoene structure.
3. (Currently Amended) The pharmaceutical composition adjuvant of claim 2, wherein the unsaturated fatty acid with 18 carbon atoms that has a trihydroxy-monoene structure is 9,12,13-trihydroxy-10E-octadecenoic acid, of which structure is as follows:



wherein R1 is selected from the group consisting of a hydroxyl group and a substituent comprising a linkage of 1 or 2 alkyl groups or aryl groups to 1 oxygen, sulfur, or nitrogen atom; and R2, R3, and R4 are independently selected from the group consisting of hydrogen, alkyl group, and acyl group and may each be identical or different.

4. (Currently Amended) The pharmaceutical composition adjuvant of claim 1, wherein the purified hydroxy unsaturated fatty acid is a hydroxy unsaturated fatty acid prepared from a medicinal plant.

5. (Withdrawn - Currently Amended) A vaccine preparation comprising an antigen constituent and the pharmaceutical composition adjuvant of claim 1 as a constituent.

6. (Withdrawn - Currently Amended) The vaccine preparation of claim 5, wherein the pharmaceutical composition adjuvant in the vaccine preparation is used in an oral inoculation independently of the antigen constituent.

7. (Withdrawn) The vaccine preparation of claim 6, wherein the antigen constituent in the vaccine preparation is used in an intranasal, subcutaneous, oral, or intramuscular inoculation or is inoculated through other mucosae.

8. (Withdrawn) The vaccine preparation of claim 5, wherein the antigen is derived from one or more pathogenic microorganisms selected from the group consisting of influenza virus, rotavirus, measles virus, rubella virus, mumps virus, AIDS virus, *Bordetella pertussis*, diphtheria bacillus, *Helicobacter pylori*, enterohaemorrhagic *Escherichia coli* (EHEC), *Chlamydia*, *Mycoplasma*, Malaria *Plasmodium*, coccidium, and schistosome.

9. (Withdrawn - Currently Amended) A method for administering the vaccine preparation of claim 5, the method comprising orally administering the pharmaceutical composition adjuvant in the vaccine preparation independently of the antigen constituent.

10. (Withdrawn) The method of claim 9, wherein the antigen constituent is inoculated intranasally, subcutaneously, orally, or intramuscularly, or through other mucosae.

11. (Withdrawn - Currently Amended) The vaccine preparation of claim 5, wherein the pharmaceutical composition adjuvant in the vaccine preparation is mixed with the antigen constituent.

12. (Withdrawn - Currently Amended) A method of enhancing the immunological activity of a vaccine, wherein the method comprises administering the pharmaceutical composition adjuvant of claim 1 and a vaccine antigen.

13. (Withdrawn - Currently Amended) The method of claim 1, wherein the pharmaceutical composition adjuvant is orally administered and the vaccine antigen is administered intranasally, subcutaneously, orally, or intramuscularly, or through other mucosae.

14. (Withdrawn) The method of claim 12, wherein the vaccine antigen is derived from one or more pathogenic microorganisms selected from the group consisting of influenza virus, rotavirus, measles virus, rubella virus, mumps virus, AIDS virus, *Bordetella pertussis*, diphtheria bacillus, *Helicobacter pylori*, enterohaemorrhagic *Escherichia coli* (EHEC), *Chlamydia*, *Mycoplasma*, *Malaria Plasmodium*, coccidium, and schistosome.

15. (New) A pharmaceutical composition comprising a purified or synthesized hydroxy unsaturated fatty acid as an active ingredient and a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety, and wherein the pharmaceutical composition comprises an adjuvant activity.

16. (New) A pharmaceutical composition comprising a purified or synthesized hydroxy unsaturated fatty acid as an active ingredient and a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety, and wherein the pharmaceutical composition has an activity of enhancing the immune response to an antigen.

17. (New) An adjuvant consisting essentially of a purified or synthesized hydroxy unsaturated fatty acid as a sole active ingredient and a pharmaceutically acceptable carrier, wherein the hydroxy unsaturated fatty acid is an unsaturated fatty acid with 18 carbon atoms and the unsaturated fatty acid may be substituted at its hydroxyl group or a carbonyl group of a carboxylate moiety.